XIII. *Occultatio* Palilicii, A. 1738. *d* 23. Decembris *St. N. obſervata a D.* Chriſtfried Kirchio, *Aſtronomo Regio*, Berolini. *Ex literis ad* J. F. Weidlerum *datis excerpta.*

	Tempus horolog. oſcillat. H. M. S.		Partes microm. Tubo ped	Valor partium microm. ′ ″	Tempus correctum. H. M. S.	Tempus correctius. H. M. S.
1	5 56 37	✱ a centro *M. Sinai*	38	15 21	6 24 37	
2	5 58 30	✱ a centro *M. Sinai*	34	13 42	26 30	
3	7 3 54	Immerſio ſtellæ			6 31 54	6 32 00
4	8 5 29	Emerſio ſtellæ tub. 9 ped			7 33 29	7 33 33
5	5 35	Emerſio certo facta			7 33 35	
6	6 43	✱ a centro *M. Sinai*	36	14 32	34 43	
7	15 32	✱ a prox. marg. Lunæ	8	3 14	43 32	
8	20	✱ a *M. Sinai*	46½	18 47	48	
9	28	Diameter Lunæ	74 }	29 73	56	
		vel	73½ }	29 41		
10	29 12	*M. Sinai* a prox. marg. ☽	8	3 14	7 57 12	
11	38	Diameter ☽ ſub. 9 ped.	99½	29 38	8 6	
12	42	Diameter ☽ ſub. 7 ped.	75	30	10	
13	46 55	✱ a *M. Sinai*	72	29 5	14 55	
14	8 48	Diameter Lunæ	73½	29 41	8 16	

Vide SCHEMA hujus Occultationis in TAB. II. Fig. 2.

Situs ſtellæ reſpectu macularum lunarium ſequenti modo obſervatus.

I. Ante obſervationem (1.) h. 6. 20′. notavi ſtellam in linea recta a meridionali margine Inſulæ Macræ (Poſidonii) per ſeptentrionalem partem Ponti Euxini, (medium maris Serenitatis) & M. Ætnam (Copernicum) producta: & linea a M. Sinai ad ſtellam fere ſtringebat littus ſinus Sirbonidis. (M. Humorum).

II. Tempore obſervationis, (1.) ſtella erat in linea recta a lacu nigro majore (Platone) per partes orientales inſulæ Cercinnæ (a Keplero verſus ortum) producta.

III. Tempore obſervationis (2.) ſtella in linea per medium Paludis Mæotidis & medium M. Adriatici (per M. Criſium & S. medium) continuata.

IV. Tempore immerſionis ſtellæ, ſequentes lineæ rectæ ad illam coincidebant, & locum peripheriæ lunaris, ubi ſtella occultabatur, deſignabant.

1. A littore Pontus Euxini (M. Serenitatis) verſus Cæciam ſpectante, per M. Ætnam (Copernicum).
2. A littore ſinus Apollinis, per loca paludoſa (ſc. a littore S. Iridum, per Keplerum).
3. A M. Sinai (Tychone) per littus meridionale S. Sirbonis (M. Humorum).

V. Emerſio ſtellæ contigit e regione M. Paropamiſi, (Furnerii) & in linea recta a lacu nigro majore (Platone) per Byzantium (Menelaum) producta, quæ ſtringebat ſinum extremum Ponti (M. Nectaris).

VI. Tempore obſervationis (7.) M. Porphyrites, (Ariſtarchus) margo ſeptentrionalis L. Theſpitis (Fracaſtorii) & ſtella in linea recta.

VII. Tempore obſervationis (8.) Lacus Hyperboreus ſuperior (Hermes) medium Paludis Mæotidis (M. Criſii) & ſtella in linea recta.

Occultatio Palilicii obſervata Vitembergæ Saxonum, d. XXIII. Dec. *St. N. A.* CIↃDCCXXXVIII. *a* Jo. Friderico Weidlero, R. S. Lond. S. *&c.*

Immerſio	6.	27.	35.
Emerſio	7.	29.	20.
Duratio	1.	1.	45.

ANNOTATIONES.

1. Obſervatio a duobus ſpectatoribus ſimul peracta; ego tubo aſtronomico IX pedum utebar, amicus & ſocius obſervationis per teleſcopium IV pedum lunam contuebatur.

2. Immerſio & emerſio facta in inſtanti: uno tamen prope minuto horario citius per longiorem, quam per breviorem tubum animadverſa.

3. Appulit ſtella ad marginem lunæ orientalem, circa gradum 163. ſchematis lunæ plenæ mobilis Heveliani, Selenographiæ, p. 364. emergebat circa gradum 272. ejuſdem ſchematis. Itaque linea recta, puncta immerſionis & emerſionis copulans, ſtringit extrema maris Humorum & Nubium & inter Pitatum & Mare Nubium tranſit.

Cœlum tempore immerſionis ſerenum non erat, ſed tenues nubeculæ ſemper fere ante lunam & ſtellam oberrabant: ideoque figura ſtellæ oblonga, diu ante occultationem, per atmoſphæræ vapores ſpectabatur.

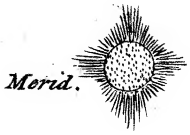
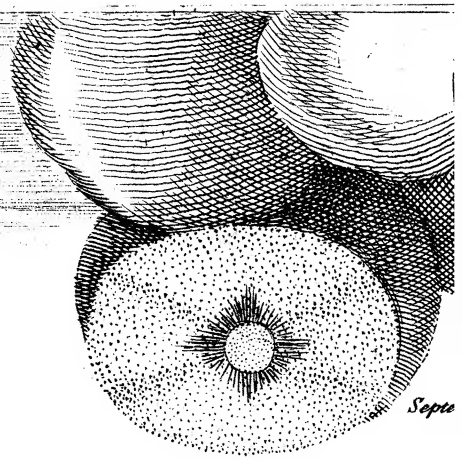


Fig. 1.



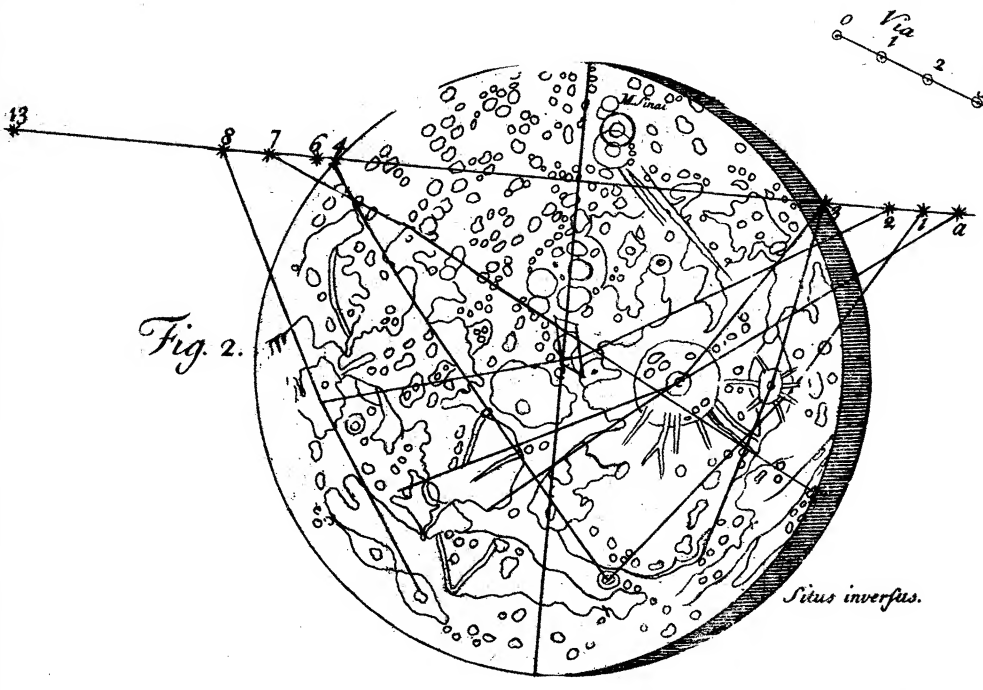
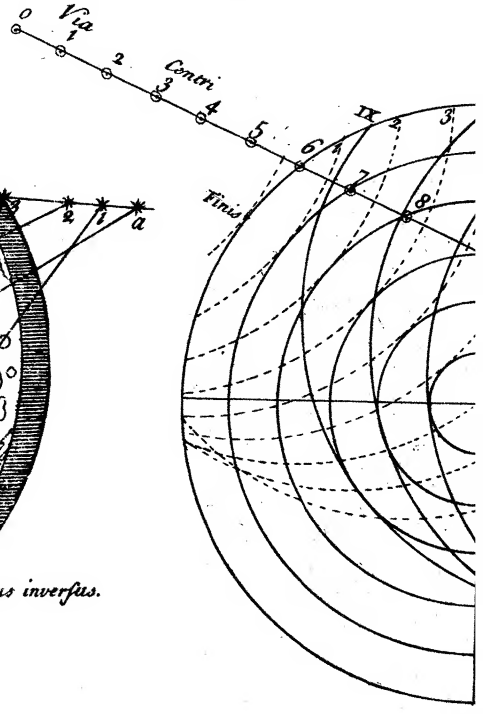
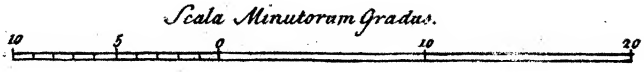


Fig. 2.



Scala Minutorum Gradus.



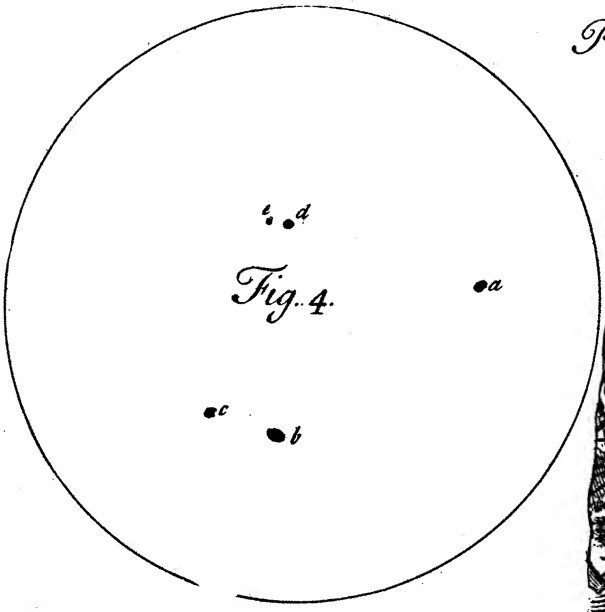


Fig. 4.

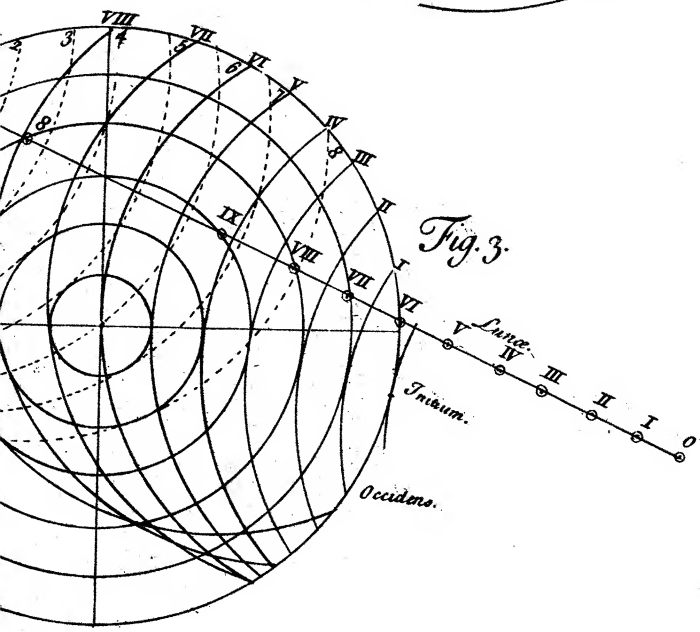
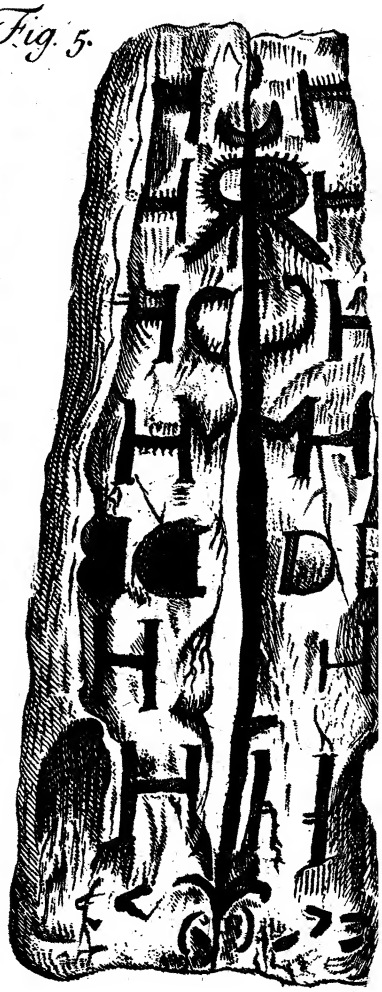


Fig. 3.

Fig. 5.



TAB. II.

Myndt Sculp.

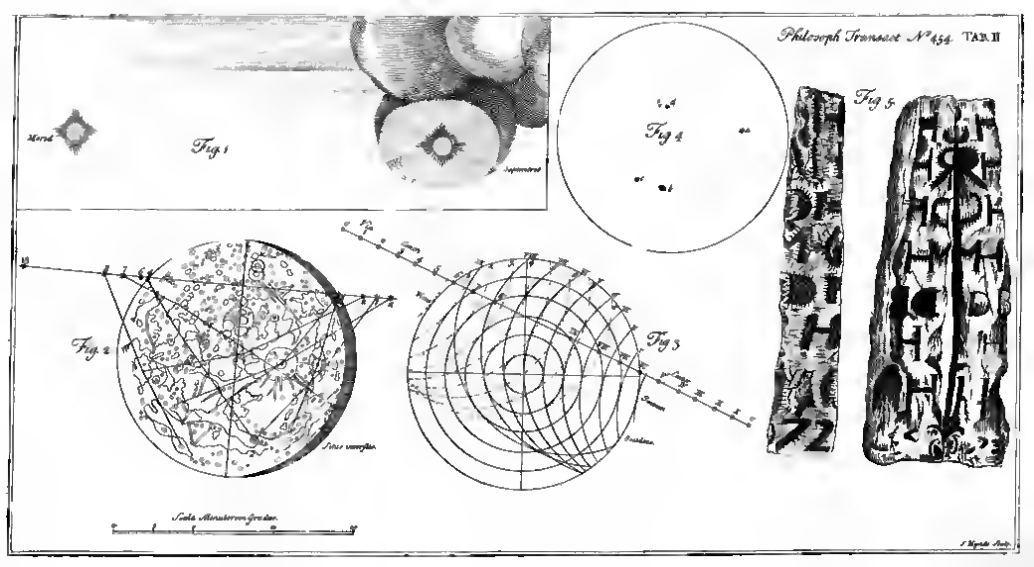

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Fig. 1
Fig. 2
Fig. 3
Fig. 4
Fig. 5
Scala Minuterum Graduum